

CLAIMS

1. An assay to detect breast cancer, said assay including at least two of the following breast cancer markers: mammaglobin, BU101, and BS106.
2. A method to detect breast cancer comprising the steps of:
  - (a) obtaining a test sample from a patient;
  - (b) contacting said test sample with at least two polypeptides selected from the group consisting of mammaglobin, BU101, and BS106; and
  - (c) correlating the presence of one or more of the polypeptides of step (b) to breast cancer.
3. A method of detecting the presence of breast cancer comprising the steps of:
  - (a) obtaining a sample from a patient;
  - (b) contacting said sample with at least two antibodies specific for BS106, mammaglobin, BU101 and a multimeric antigen (MPA),  
wherein said multimeric antigen comprises at least one BU101 polypeptide and at least one mammaglobin polypeptide,  
wherein said contact is for a time and under conditions sufficient to allow formulation of antigen/antibody complexes; and
  - (c) detecting said complexes wherein the presence of said complex indicates the presence of cancer in said patient.
4. A method of diagnosing breast cancer in a patient comprising the steps of:
  - (a) preparing a tissue section or cell culture derived from a tumor excised from said patient;
  - (b) exposing said tissue section or cell culture to an antibody specific for at least two of the following polypeptides: BS106, mammaglobin and BU101 for a time and under conditions sufficient to allow formation of antigen/antibody complexes; and
  - (c) localizing presence of said complexes in said tissue section or cell culture, wherein the presence of said complexes indicates the presence of breast cancer in said patient.

5. A method to detect breast cancer comprising the steps of:
- (a) obtaining a test sample from a patient;
  - (b) contacting said test sample with at least two polypeptides selected from the group consisting of mammaglobin, BU101, BS106 and MPA;
  - 5 and
  - (c) correlating the presence of one or more of the polypeptides of step (b) to breast cancer.

10